

EDMS *Reference Manual* Supplement

-Model Changes Between EDMS 4.02 and EDMS 4.03-

June 28, 2002

AERMET

Change	Effect
<p><u>TD-3280 Data Processing</u> In previous versions, AERMET did not properly read all surface weather elements of TD-3280 data format. EPA has fixed this bug, and AERMET can now read all of the necessary elements from those files. This update replaces the previously installed AERMET executables with version 02018. The included AERMOD executable (version 99351) was recompiled by EPA to be fully compatible with the revised AERMET.</p> <p>Additional information about AERMET is available at the EPA SCRAM site: http://www.epa.gov/scram001/tt26.htm#aermod</p>	<p>The user can now use TD-3280 surface meteorological data for their studies.</p>

AERMOD Hourly Emissions File

Change	Effect
<p><u>Configurations Processing</u> In previous versions, EDMS failed to apply configurations after the first few hours of the AERMOD hourly emissions (.hre) file. This update corrects this issue.</p>	<p>All defined configurations are correctly applied to all hours throughout the entire period being modeled.</p>

Taxiways

Change	Effect
<p><u>Taxi Time Warning Message</u> In previous versions, if a taxiway point located far from the (0,0) origin was entered, EDMS may temporarily estimate a taxi time greater than 100 minutes before the other point was entered. This caused a warning message to appear on the screen that instructed the user to "enter a number between 0 and 100." Because the taxi time value cannot be changed directly, it effectively made it impossible to enter the remaining taxiway coordinates. This warning message has been eliminated.</p>	<p>The user is able to enter taxiway coordinates as far away as (999999,999999) or (-999999,-999999) feet without receiving a warning about the taxi time being too long.</p>

Roadways

Change

Number of Vehicles Warning Message

In previous versions, if the entered number of vehicles per year caused the recomputed number of vehicles per peak hour to exceed its limit of 100,000, the user was warned but could not readily rectify this because the vehicles per peak hour field would be disabled. In this update, if the recomputed number of vehicles per peak hour exceeds its limit, it is automatically trimmed back to the maximum of 100,000.

Effect

The user is able to enter the number of vehicles per year without receiving a warning about the number of vehicles per peak hour being out of range.

Aircraft

Change

User-Created Helicopters

In previous versions, if a user attempted to add a user-created helicopter to a study, EDMS would crash and corrupt the in-study aircraft table, the USER_AIR.DBF file. This problem has been fixed in this release.

Effect

The user may include user-created helicopters in studies.

Takeoff Weight & Approach Angle

In previous versions, the takeoff weight and approach angle controls would deactivate only if the selected aircraft was a helicopter. In this version, the controls also deactivate if the selected aircraft is user-created and the study is emissions only.

The user no longer has to select a takeoff weight or approach angle for user-created aircraft when conducting an emissions only study.

Takeoff Weight Warning Message

In previous versions, the user may be warned that no takeoff weight is assigned to a selected aircraft when the takeoff weight control is either disabled or empty and the user is, hence, unable to select any weight. In this version, such a warning is given only if the control is enabled. Furthermore, if there are no weights to choose from and the selected aircraft is user-created, the user is directed to assign a flight profile to the aircraft in the user-created aircraft dialog box.

The user is no longer unnecessarily warned that no takeoff weight has been assigned to an aircraft and is provided a more detailed warning when the takeoff weight is necessary.